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The Cock.—By Dr. JOHN P. PETERS, New York City

In 1888 I read, before the Society of Biblical Literature and Exegesis, a paper on Leviticus I., in which I sought to prove, from the animals there mentioned as sacrificial, and particularly from the non-appearance of the cock, that, before the time of the Babylonian captivity "the *torah* of animal sacrifice had completed the creative and reached the legal or unchangeable period." In the preparation of that paper I depended for my facts about the cock on Hehn's *Kulturpflanzen und Hausthiere*.¹ Since that time I have made an independent investigation of the history of that bird with results differing from or supplementing Hehn to such an extent that I have been led to formulate this new material in a second paper, commencing, however, as before, with Hebrew and Biblical use.

The first six chapters of Leviticus constitute a sacrificial code, which evidently, in its present form, is both a compilation and a growth. The final compilation is presumably post-exilic, but I fancy that the code itself represents pretty well the sacrificial practice of the Jerusalem Temple before the captivity, while parts of it go back in essence to a much older period. The rule with regard to sacrifice among the Hebrews was that the sacrificial animal must be both comestible and domesticated. Wild animals might not be sacrificed. Now in actual practice only oxen, sheep and goats were permitted to be eaten by the Hebrews in sacrifice. In the *torah* of the whole burnt sacrifices, however, contained in Chapter I., besides these three animals the dove, in two varieties, *יונה* and *תר*, was permitted to be offered. This permission is added like a sort of codicil at the end of Leviticus I. It gives the

¹ The last, posthumous, 8th edition, by O. Schrader, adds nothing to the material in Hehn's original volume, in spite of the additional monumental material now accessible. A note by Schrader purports to give later Assyrian-Babylonian material, but is quite valueless and sadly misleading.

impression of an afterthought, as though of later origin. For trespass and sin offerings, where the flesh was not to be eaten, provided for in Chapters 4, 5 and 6, and for some other offerings, like the purification offering (Chap. 12), a similar provision was made. The use in sacrifice of the three animals mentioned and the two forms of dove can be traced back to the earliest Hebrew writings. Indeed, we may say that the sacrifice of oxen, sheep and goats long antedates Hebrew origins, and that the sacrifice of the dove was practised by the Hebrews certainly as early as 900 B. C.¹ The domestication of oxen, sheep and goats extends into a hoary antiquity, antedating both the Babylonian and the Egyptian civilizations. The dove also was domesticated at a very early period in Babylonia, in Syria, and in general, apparently, over the whole of hither Asia. It is noticeable that our own barnyard fowl, which is today found practically everywhere throughout the world, in cold countries and hot, as a part even of the household equipment of wandering Bedawin Arabs, does not appear in the sacrificial codes.

Outside of the dove, there is no mention of domesticated fowl in the Old Testament, with three possible exceptions. One of these is 1 Kings 5: 3, the account of the provision for Solomon's table. This was to be supplied with ten oxen, fattened, gazelles, roebucks, and **בְּרִירִים אַבֻּסִים**, rendered in the

¹ Cf. the Yahawist, Gen. 15: 9f. In the Marseilles sacrificial tariff and in the similar tariff found at Carthage by Nathan Davis in 1858, commonly known as the Davis Phoenician Inscription, we have the same quadrupeds mentioned for sacrifice as in the Levitical sacrificial list, namely, the ox, goat and sheep. We also have two birds mentioned, connected together as one whole, as in the Levitical code. The words used for these birds, **אֲנָן, צִיץ**, are elsewhere unknown. The close resemblance of the code, as a whole, to the Hebrew suggests that the birds here used are the same as those in the Hebrew code. Ball (*Light from the East*) calls attention to the fact that in the Samaritan Targum the word **צִיץ** appears to mean "young pigeon", being the translation of **נוֹל** of Genesis 15: 9. Of course if **צִיץ** be pigeon, then it follows of itself that **אֲנָן** is dove. These two tablets, while themselves not very old (somewhere, probably, between 300 and 500 B. C.), give us, presumably, the old Phoenician custom of sacrifice. If the translation suggested above be correct, then the old Phoenician code was practically identical with the Hebrew; and the natural conclusion would be that the Hebrew code was borrowed from a pre-Hebraic Canaanite source, considerably antedating, therefore, 900 B. C.

English version "fatted fowl," following the Septuagint and Vulgate. The Briggs-Brown-Driver Gesenius suggests that these were geese. This would seem, on the whole, the most plausible conjecture, and, if correct, the passage would indicate that the Hebrews, at or after Solomon's period, did have access to one variety at least of domestic fowl, whether they raised them themselves or obtained them from others. It would appear, however, that these fowl were certainly not common. They did not constitute an ordinary article of food. They are mentioned nowhere else. Even if known within the creative period of the sacrificial *torah*, they never came to play such a part as articles of food as to lead to their adoption into the sacrificial code, either for general or for special sacrifices.

The goose and the duck were elsewhere domesticated at a very early date. We find evidence of this in ancient Egyptian and Babylonian monuments; and Greek and Roman literature and tradition represent the goose as early domesticated there also. Palestine was a land naturally ill adapted for the domestication of either geese or ducks, and while such domestication was possible on the low lands, in the regions regularly occupied by either Judah or Israel there was very little chance for such domestication and little temptation to it. It is natural, therefore, that we should not find any mention of geese or ducks in the Old Testament, in or out of the sacrificial code, with the possible exception of the passage alluded to; which would seem to show that they were known only as a luxury, procurable by one in Solomon's position, but not by the ordinary man.

The second exception is the peacock (תניינים), mentioned in 1 Kings 10: 22, and 2 Chron. 9: 21, as imported by Solomon. As the name was imported with the bird, there is in this case no doubt as to its identification or its origin;¹ which only shows, however, that at the time this passage was written, and traditionally since Solomon's time, the peacock was known to the Jews as a wonder bird, fit possession of great kings, and that it came originally from India, reaching the Mediterranean lands by way of the Red Sea.

¹ The Hebrew and the Greek, like the Sanskrit, borrowed the name of the bird from the Tamul *togei*.

The third possible exception is the cock, our domestic barn-yard fowl, which, it is claimed, is mentioned under three different names in three different passages: Is. 22: 17, Job 38: 36, and Prov. 30: 31. In the first case the word used is נָבֵר, the common Hebrew word for *male*, then *man*, then *person* or *each*. Jerome was advised by his Hebrew instructor, apparently, that the word in this passage, and nowhere else in the Old Testament, meant *cock*, and he so translated it. *Dominus asportari te faciet, sicut asportatur gallus gallinaceus*. The word did in fact come to have this meaning in post-biblical Hebrew.¹ The method of translation of sense seems to be indicated by the use of נָבֵר as a euphemism for *membrum virile*. It was the salacity of the cock which led to his designation as נָבֵר, *male*. The passage under consideration, as it stands in the Hebrew, is difficult. The LXX translators botched it badly. Their rendering, however, makes it plain that נָבֵר did not mean cock in their day, but only *man*. After it had come to mean cock, by the transition noted above, it was natural to read that meaning into this passage as a promising way of gaining an immediate sense. This seems to be what was done by later Jewish scholars, and by Jerome following them. His translation, however, ruins the passage as a whole, and today all commentators agree that נָבֵר does not either here or elsewhere mean cock.²

¹ נָבֵר appears as the name of the cock in the language of Mishnah as early as about 60 A. D. (Yoma I. 8). Eusebius in his commentary on Isaiah mentions the Rabbinical interpretation of נָבֵר in Is. 22: 17 as cock.

² The difficulty in this passage has, I think, been caused by a play on the words קָבֵר and נָבֵר. In v. 16 Isaiah had reproached Shebna with his ostentatious pomp in cutting himself a tomb, קָבֵר, in the rock. In v. 17 he predicts his violent removal into captivity in Mesopotamia. "Behold, Yahaweh casteth thee out with a casting, (נָבֵר) man". The word *man* (נָבֵר) is used because it sounds, in common pronunciation, almost exactly like the word for tomb (קָבֵר). This diverts Isaiah for a moment from the direct line of his annunciation of Shebna's captivity into burial figures: "Wrapping thee with a wrapping, winding he windeth thee with a winding." The resemblance in letters of צָנָה and σφιν made the puzzled Greek translators translate τὸν στέφανόν σου τὸν ἐνδοξόν—"thy glorious crown," which Jerome has still further twisted into *coronans coronabit te tribulatione* (evidently neither LXX nor Jerome could make much out of the passage). Then he takes up again his annunciation of Shebna's coming captivity and proceeds: "Like a ball into a land broad

In the next passage, Job 38: 36, the word rendered cock is not נָכַר but שָׁכִי. According to R. Hash. in "the district of K. N." the cock was called שָׁכִי (*sekhvi*). Y. Ber. says that in Rome also it was so called; and Lev. R. that in Arabia the hen was called *sikhvaya* (שָׁכִיָּא).¹ In classical Hebrew this word is an ἀπαξ λεγόμενον, occurring only in this passage. The LXX has translated the verse: τίς δὲ ἔδωκεν γυναικὶ ὑφάσματος σοφίαν καὶ ποικιλικήν ἐπιστήμην, "Who gave woman wisdom of web and embroidery experience?" It is impossible to connect this with the Hebrew text, and its lack of relation to the context evinces its error. Jerome apparently learned from his *Hebraeus* the late Jewish tradition regarding שָׁכִי and translated accordingly: "Quis posuit in visceribus hominis sapientiam vel quis dedit gallo intelligentiam", which makes good enough sense in itself, but has no relation whatever to the context (The same treatment of the Bible as texts without context which we saw in Is. 22: 17). This is part of a long passage, put in the mouth of Yahaweh, telling of His wonderful creation of the earth and the sea (4-11), the morning, the deep and the light (12-21), the snow, wind, lightning and rain (22-30), the stars and sky (31-33), the clouds (34-38); then the beasts, lions (39-4), wild goats (39: 1-4), ass (5-8) &c. Our verse falls in the creation of the clouds:

"Canst thou lift up thy voice to the clouds,
That abundance of waters may cover thee?
Canst thou send forth lightnings, that they may go,
And say unto thee, Here are we?
Who hath put wisdom in the inward parts?
Or who hath given understanding to the שָׁכִי?
Who can number the clouds by wisdom,
Or who can pour out the waters of heaven;
When the dust runneth into a mass,
And the clouds cleave fast together?"

Evidently there is no mention of the cock in this passage.

on both hands, &c." Perhaps the idea of the passage might be rendered thus: "Behold, Yahaweh casteth thee out with a casting, man ([נָכַר *man*, playing on נָכַר tomb], wrapping thee with a wrapping, winding he windeth thee with a winding), like a ball into a land broad on both hands; and there are the chariots of thy glory, shame of thy lord's house".

¹ Always in some other region; never in Palestine.

The context shows that the שְׂכִי must mean something in the inner side of the clouds. The Peshitto and the Targum to this passage both support this by their very misunderstanding of the passage, the מַחֵת and שְׂכִי being supposed to be, not the secret parts and hidden things within the clouds, but the reins and heart of man. A comment upon this verse in the Targum¹ shows, however, that at a fairly early post-biblical period it was connected with the cock, and there is no doubt that the word שְׂכִי in Neo-Hebrew does actually mean cock; but the context shows that, whatever its later meaning, in this passage (if indeed the text be correct) the word cannot have had that meaning.

There remains the passage, Prov. 30: 31, where the word rendered cock is זִרְיִר. This occurs in one of the number riddles, in threes and fours. "There are three which march well, and four which walk well": (1) the lion; (2) זִרְיִר; (3) the he-goat; and (4) the king. Beginning with (2) the Hebrew text is manifestly corrupt, and quite incapable of translation. It contains impossible words; and it is also defective, lacking the descriptive phrases which should accompany the names. The Greek, the Peshitto and the Aramaic Targum agree in giving a fuller and an intelligible text. Using in general that text, the answer to the riddle is as follows: (1) "The young lion, mightiest of beasts, which retreateth before none; (2) The cock, which gallantly treadeth the hens; (3) The he-goat, leader of the flock; (4) And the king, boasting himself over the people."

Jerome evidently had the same corrupt text which we have, but in his time the tradition still lingered that the second member was the cock. Accordingly he translates זִרְיִר מַתָּנִים as *gallus succinctus lumbos*. Modern scholars have in general followed his rendering, omitting the *gallus*; and, as the creature most girded up in the loins is the greyhound, זִרְיִר מַתָּנִים has been commonly translated *greyhound*. Now in reality the Hebrew text confirms the Greek and Syriac versions both here and in (4). The impossible אֱלָקִים of the Hebrew con-

¹ Lagarde, *Hagiographa chaldaice*. The earliest Talmudic testimony to the interpretation of *sekwi* as cock is a blessing in Berachoth, 60 f. Possibly it was the meteorological function of the cock, as announcing the day, there referred to, which led to the interpretation of *sekwi* as cock. More probably a false etymology, suggested by the Persian name, Parodarsh, *foreseer*, by which שְׂכִי was derived from סָכָה to see, *foresee*.

tains the קים of the Targum and Peshitto, translated by the *δημυγορῶν* of the Greek. Similarly the מתנים of the Hebrew suggests the hithpoel participle מתרנל. The passage seemed to some scribe indecent, and he drew a line through it. All that survived his elision was the names of the creatures and the fragmentary confusion of letters which constitutes our present text. Jerome had before him, as already stated, this emended text, but with the tradition that the second member was the cock.

But while the evidence of the versions, supported by the sense of the passage, requires the translation of זוריר by cock, it must be said that in Neo-Hebrew the word means *starling*, and that the same word has the same meaning in Syriac and Arabic. The word is to an extent onomatopoeic, as are cock and cuckoo. These latter were in fact originally one, applied to both cock and cuckoo, but ultimately differentiated to apply each to one specific bird. Somewhat similarly, I fancy, זוריר, as a word supposed to represent a bird sound, was applied to this half-known bird, the cock, as well as to the starling. Later the loan word, תרנגל, was appropriated to the cock, and זוריר became the name of the starling only.

The 30th chapter of Proverbs, in which this passage occurs, is by general consent the latest part of that book, and is ordinarily supposed to have at least a half foreign tone. Toy, in his commentary in the International series, represents the extreme late date theory, placing it in the second century B. C. The reference to the cock in this passage probably involves an earlier date. At the time when this riddle was composed, the cock was known much as the goose and the peacock were known at the time of writing of the passages referring to those birds in Kings. Certain of its peculiar habits were matters of fairly common knowledge, and it was evidently being introduced among the Jews, or was domesticated among some of their neighbors. It was not yet, however, in ordinary use, and was still so much of a rarity that it had not achieved a real, permanent name. I think this riddle must be dated certainly earlier than 200 B. C.¹

To sum up: While both the words נכר and שכני appear in neo-Hebrew for cock, it is clear that they do not have that

¹ Possibly, of course, this riddle may have originated among the Jews in Egypt or elsewhere, and been imported into Palestine; which does not, however, affect the question of its date in Palestine.

sense in Biblical Hebrew. How the word נבר, *male*, came to be an appellation of the bird is clear; why שכוי was so translated is not equally clear. The cock began to become known to the Jews in Palestine as early as the third century, and is mentioned in Proverbs 30: 31, but by a name, זוריר, which we find elsewhere, and in kindred languages, applied to the starling, or sometimes to the raven. The regular Talmudic name for *cock*, which appears also in the Targums, was תרנגל or תרנגול, a loan word from the Aramaic, of uncertain, plainly not Semitic origin. The linguistic evidence would go to show that the cock was domesticated in Palestine some time between the close of the Canon and the commencement of the Mishnic period.

From what source was he borrowed? In the later Apocryphal literature of the Jews the cock plays a part which is evidently borrowed from the Persians. So in the Greek Baruch Apocalypse, in the description of the third heaven (6, 7), the rustling of the wings of the Phenix, the forerunner of the sun, wakes the cocks, who then by their crowing proclaim the coming of the dawn. Similarly in Persian Sraosha, the heavenly watcher, awaked by Atar, the fire, in his turn awakes the cock. With this may be compared further the Slavonic Enoch (xvi. 1), according to which, when the angels get the sun ready for his daily journey, the cocks crow.

Both the New Testament and the Talmud mention the cock. He was clearly a familiar creature in Palestine at that period. The former gives us the picture of a use and knowledge of the bird similar to our own. His crow, ushering in the dawn, was a sound so familiar to all that cock-crow had come to be a designation of time (cf. Mark 13: 35). About 70 A. D. the Talmud (Gittin 57 a) mentions a custom prevailing in Palestine of having a cock and hen present at the wedding ceremony. Evidently they were fertility emblems, appropriate to a wedding for somewhat the same reason which led to the exclusion of the cock from the text of Prov. 30: 31.

Beside his function as a marriage bird, in Talmudic use the cock was also apotropaic. It is perhaps this characteristic which led to the blessing enjoined to be pronounced when the cock is heard to crow: (Berakhoth 60b):¹ "Praised be thou,

¹ Already referred to on p. 368 of this paper, note. The passage suggests Persian influence.

O God, Lord of the world, that gavest understanding to the cock to distinguish between day and night."

On the other hand we find evidences that the cock was not domesticated in Palestine without opposition. So Baba Kam. 82b notes that the breeding of cocks was forbidden while the temple was in existence, because they scratch the ground and pick up and disseminate objects levitically unclean.¹ Elsewhere the sale of white fowls is forbidden, apparently because they were used for sacrifice by the heathen.

Today the cock is used sacrificially among the Jews, both Sephardim and Ashkenazim, in connection with Yom Kippur, as an atonement² offering (*Kapparah*)—a cock by the man, a hen by the woman—being swung three times around the head of the offerer, with the right hand upon the head of the victim, somewhat as in the sin and atonement offerings ordered in the Old Testament. The creature is killed, but is not burned; as seems to have been the rule with doves, when used as offerings, according to the old temple ritual. Its flesh may be given to the poor to eat or it may be eaten by those sacrificing, the money value being given to the poor. This sacrifice is mentioned for the first time by Natronai Gaon, head of the Academy of Sura in Babylonia, in 853 A. D., who describes it as a custom of the Babylonian Jews. It is also mentioned as a custom of the Persian Jews at an early date. The cock also has been, or is now used among Jews in various places for special sacrificial purposes of the purification or sin type (*Kapparah*),³ also for apotropaic sacrificial purposes.⁴

The Jew has evidently felt the same influence toward using the cock in sacrifice which all other peoples and religions have experienced; and so strong has that influence been that, in

¹ Jewish Enc., art. cock.

² Among Sephardic Jews, at least, always white.

³ So when a man is sick, a cock is killed. Curtiss, *Primitive Semitic Religion* (p. 203), notes the same use in a Mohammedan village. Apparently there, and among the Nusairieh also, a *Kapparah* sacrifice of the sort described above was in use, a sheep being used by the wealthy, a cock by the common folk.

⁴ For the woman enceinte two hens and one cock are offered. For references and verification in Jewish Literature and practice, I am especially indebted to Pres. Adler and Profs. Ginzberg, Gottheil and Jastrow.

spite of the fact that theoretically sacrifice ended with the destruction of the temple, practically, as stated, the cock, not included in the old *torah* of sacrifice, is today the one sacrificial animal of the Jews. Indeed, the cock may be said to be a natural sacrificial animal, its use for these purposes being almost universal. Its omission from the sacrificial codes contained in the Old Testament is due evidently only to the fact that it was quite unknown to the Jews at the time of the crystalization of the sacrificial *torah*.

Whence, when and how did the cock come into Palestine?

The ancestor of our common domestic fowl is the wild Red Junglefowl (*Gallus gallus*),¹ whose habitat extends from Kashmir eastward along the southern slopes of the Himalayas, through Eastern India, Burma and the Malay Peninsula, and some of the East India islands. This wild bird often associates with the domestic fowls in the villages of the natives, and frequently crosses with them. There are three other species of wild Junglefowl, living respectively in central and southern India, Ceylon, and Java, but they had no part in the direct ancestry of our domestic fowl. It is barely possible but improbable that the Buff Cochins-China fowls are descended from some unknown, perhaps extinct wild Junglefowl, but with this possible exception, all varieties of domestic fowl are descended from the wild Red Junglefowl. The semi-tropical and tropical zone which the Red Junglefowl inhabits would seem to indicate that for many thousands of years its range has differed but slightly from its present distribution.

There are a number of reasons, derived from the study of comparative ornithology, which indicate that the original home of the Red Junglefowl, or at least the most anciently inhabited part of its present range, lies to the East and South, in the Burmese-Malayan portion of its present habitat, rather than to the West in the Indian region. Distributional study of other birds, as the Kaleegee Pheasants, makes it certain that these originated in Burma and have since migrated westward along an elongated, sub-Himalayan finger, stretching as far as Kashmir. The same holds true of a number of other forms of life both mammalian and avian. There is no doubt that the Red Junglefowl is of tropical or sub-tropical origin. Neither

¹ *Phasianus gallus* of Linnaeus; *Gallus bankiva* of Temminck; also *Gallus ferrugineus*.

it, nor its domesticated descendants can bear extreme cold; and the elaborately specialized, exposed comb and wattles could have been evolved only in a warm country. The three other species of Junglefowl are all tropical and the affinities of the group among the other pheasants are altogether with south Chinese and Malayan genera.¹

Newton² says: "Several circumstances seem to render it likely that fowls were first domesticated in Burma or the countries adjacent thereto." Those circumstances are, I presume, the facts stated above, and it may be safely assumed that the Burmese region was the original site of domestication of the fowl; but from that region we have neither literature nor monuments to support this conclusion. The two centers of primitive civilization near the fowl's original habitat about which we have early information are China and India.

China.

In China we find very early traces of the domestication of the cock, such domestication being traceable according to tradition at least as early as 1400 B. C.; but here, even more than in India, it is extremely difficult to determine accurately early dates. There are no monumental records of any sort which carry us back to such a very early period, and the dating of literary records is extremely uncertain. We can really do little more than say that there is abundant evidence of the domestication of the cock in China at a very early period.³

¹ C. William Beebe, Curator of Ornithology, New York Zoological Park. The line of migration of the domestic fowl, as traced by archaeological and linguistic evidence, also suggests that its original home may have been rather the more easterly and southerly portion of its present habitat, from which it traveled westward up and against the line of Aryan invasion into Kashmir.

² Alfred Newton, *Dictionary of Birds*; see also *Encyclopaedia Britannica*, article "Fowl".

³ I am indebted to Professor Friedrich Hirth of Columbia for the following note: The present word for the domestic fowl including its male, the cock or rooster, as the head of the family, is *ki* or *kai*, the latter being the Cantonese, as being probably the nearest approach to the ancient sound. This word can be traced with tolerable safety to the times of the Ch'ou Dynasty (1122—249 B. C. ?). The *Shuo-wôn*, a Chinese dictionary, published in 100 A. D., defines the term as meaning "The domestic animal which knows the time"; and since the construction of the character of *ki* with *niao* (bird) as radical excludes quadrupeds,

It would appear that the Chinese were the first to breed the bird for utilitarian economic purposes, producing the Buff Cochin China fowl, a variety so firmly established and exhibiting such unique characteristics as to suggest, as pointed out above, the possibility of a separate species. Elsewhere the bird retains its primitive appearance as the Red Junglefowl, of which our ordinary game cock is perhaps the most nearly typical form, prized for its fighting qualities. Outside of China the breeding for more utilitarian qualities, which has produced our modern varieties, is of very recent date;¹ and those varieties apparently all owe much to crossing with the already well established Chinese breeds.

and since pigeons, ducks and geese are not in the habit of indicating time, I think we are pretty safe in assuming that the word in those days and probably centuries before had the present meaning of domestic fowl or cock. But these are comparatively recent times. The most ancient source for the occurrence of words throwing light on Chinese culture are the hieroglyphic inscriptions on bells and sacrificial vessels of the Shang Dynasty, placed by that probably fictitious Chinese chronology between the years 1766—1122 B. C. The names of birds are very poorly represented in it and the domestic fowl is not mentioned at all. But this may be purely accidental, since the material now on record probably represents merely a portion of the words then in use, and a very small portion too. You will see that oxen, sheep and other domestic animals, which might have been used for sacrificial purposes, are not mentioned either, although the word for sacrifice itself occurs. I have in vain looked for the word in those most ancient classics, *Chi-king*, *Shu-king* and, *Ch'un-ts'iu*. To make up for this I can refer you to the *Chôu-li*, regarding which work see my *Ancient history of China*, page 107 seqq., which may or may not have originated in the eleventh century B. C., and according to which the cock was used as a victim in the sacrifice (cf. "*Le Tcheou-li*", translated by E. Biot, Paris 1851, page 42 of Index: "Ki-jin, officier de coqs; il présente les coqs que l'on sacrifie"). The word *ki* occurs also in that most ancient Chinese Glossary, the *Ir-ya*, which may possibly date from the time of Confucius himself (fifth century B. C.). The cock also appears in the names of certain constellations; the astronomical nomenclature would thus raise a side question, quite apart from the legendary matter which trespasses on historical ground, e. g. the Emperor Huang-ti (twenty-seventh century B. C.) ascending a hill called Ki-t'ou, i. e. Cock's Head (E. Chavannes, *Les Mémoires Historiques de Se-ma-Ts'ien*, Vol. I, p. 30, note 3), which, like many other stories of the kind, is clearly a late fabrication, which does not deserve any notice in serious research.

¹ The Greeks bred the bird for fighting purposes, continually drawing fresh blood from Media, as we do for horses from Arabia. See Hehn.

Central Asia.

There are, in Russian Turkestan, numerous remains of an extremely ancient civilization, ruin mounds indicating the existence of a large population inhabiting cities during a long period of time, in the now desert region southward of the Aral Sea. Some of these mounds were explored by Raphael Pumpelly, and large quantities of remains, including bones, collected and examined. The indications were that these ruins were flourishing cities from a period antedating 3000 B. C. to the commencement of our era. Among the bones found there were no chicken bones, evidence to that extent that the cock was not known to that civilization, and that the cock did not originally make his way to the west from China by way of Turkestan. Probably, however, it was from China that the cock passed to the Turks and later was brought westward with them, at a time when it had already long been domesticated in the West. Professor Gottheil calls my attention to the evidence from Nestorian gravestones found in Semirjetshie, near China, that the old Turks had a "cock-year", according to which they counted. The old Turkish name for cock was *tagaku*, Uigur *tagu*, Mongolian *taugak*, Kirgiz *aigyr-tauk*), the root used today from China to Turkey and Hungary.

India.

From India we have no monumental evidence of early date with regard to the domestication of the cock, for we have indeed no early monuments of any sort. We are compelled, therefore, to trust to literary evidence as far as that goes. In the earliest stratum of Indian literature, belonging to the Indus period of the Aryan invasion, the Rig Veda, there is no mention of the cock. On the other hand he appears in the Atharva and the Yajur Vedas, which belong to the Ganges period of the Aryan occupation, the earliest mention going back to 900 B. C.,¹ or somewhat earlier. From that period onward he is mentioned with increasing frequency both in the pre-Buddhistic and in the Buddhistic literature belonging to

¹ I have taken this date from the most conservative scholars. A date at least 200 years earlier would seem to accord better with my other evidence about the cock.

this same general region, the Ganges northward and eastward.¹ All these notices, moreover, clearly indicate both a condition of domestication and also the important part which the cock played in the life and thought of the people.

¹ I am indebted to Prof. Chas. R. Lanman for the following interesting note, from which I derive the statements contained in the text.

The White Yajur Veda (Vāja Saneyi-sámhitā, i, 16) says:

Thou art a cock (kukkūṭa) whose tongue is sweet with honey,

Call to us hither sap and manly vigor.

May we with thee in every fight be victors.

(It is interesting to observe the three characteristics of the cock here mentioned: Crowing, salacity, fighting.)

The first two chapters of this text are the liturgical formulae which accompany the new-moon and full-moon sacrifices. This particular verse is address, not to a cock, but to a sacrificial implement with which the press stones are beaten, and *which is likened to a cock on account of the noise it makes.* (Cf. *Sacred books of the East*, XII. 30 and notes.)

This is the oldest occurrence that I know, except in so far as a replica of this formula is found also (according to Bloomfield's Concordance) in several other closely related texts (*Concordance*, p. 328 a, kukkuṭo'si and kuṭarur asi). We may date this text at 900 B. C. or earlier.

In the Atharva-Veda, V. 31, 2, we read (Whitney's version, *Harvard Oriental Series*. VII. 279):

What (witchcraft) they have made for thee in a cock (krka-vāku), or what in a kurīva-wearing goat; in a ewe what witchcraft they have made — — — I take that back again (I make it to revert upon its maker).

This is a passage which may be as old as the Yajur Veda passage, or possibly older.

In the Mahābhārata (iii. 228. 33) a cock is the emblem on the chariot banner of Skanda, given by his father, god Agni.

A verse attributed to Chāṇakya (about 320 B. C.; minister to Chandra-gupta, Σανδρόκοττος) says you may learn four things from a cock:

1. to fight.

2. to get up early.

3. to eat with your family.

4. to protect your spouse when she gets into trouble.

In the Mānavan Laws, *Metrical Code*, Dharma-śāstra (Laws of Manu), dated by Bühler 100 \pm , we read:

iii. 239: A Chāṇḍāla, a village pig, a cock, a dog, a menstruating woman, and a eunuch must not look at Brahmins while they eat.

(240: If they see a burnt-oblation, the oblation becomes useless — — — Because)

241: A boar makes (the rite) useless by inhaling the smell (of the offerings);

a cock by the wind that he sets in motion by the flapping of his wings; &c.

From this it would appear that the Aryans did not find the bird in the Indus valley, but met him first when they occupied the Ganges valley, about the 10th century B. C. (or 12th, see note), either themselves domesticating him, or more probably finding him already domesticated by the previous inhabitants. This fits in on the one side with the theory of the ornithologists as to the native habitat of the bird; and on the other side with the fact that the cock was not imported by sea by the Phoenicians operating with Solomon. The latter found the peacock in the India which they reached by sea, he being a native of that part of the country, but not the cock, which belonged to another region remote from that coast. In point of fact the cock is entirely lacking in just the region westward which touched India by the water route. He made his way westward by land from Kashmir through Bactria.

Bactria and Persia.

If the cock moved northward and westward up and against the line of the Aryan invasion, he should have reached Bactria

In XI—156 we read: The atonement for partaking of (the meat of) carnivorous animals, of pigs, of camels, of cocks, of crows, of donkeys, and of human flesh, is a *Tapta-kṛechva* penance.

This last verse against "eating crow" &c. goes back to a *much older* prose-text, the Dharma-sūtra of Gāutama (see J. B. E. ii. 284); and the prohibition is found in Vasiṣṭh's Dharma-sūtra also (see J. B. E. xiv. 121).

Eating the flesh of the "village cock" is prohibited with that of the goose, Brahman duck, sparrow, crane, woodpecker and parrot in Manu (V. 12, J. B. E. XXV. 171: cf. p. 172, verse 19).

In the Buddhist books the cock is mentioned in the early part of one of the very oldest, the first dialog of the *Dīgha Nikāya* (text, vol. I, page 9: see David's transl. p. 19, rendered "fowls"). This book may date from about the time of Buddha, say 475 B. C. or thereabouts.

In the Questions of Milinda (about the 1st century of our era) is a whole chapter about the cock (text, p. 366, line 12, to page 368 line 1).

Five (ways) qualities of the cock you should imitate:

1. Monk should retire early for meditation: as the cock retires early to roost.

2. Rises early.

3. Cock is unremittingly busy scratching for food: monk should be unremitting in pursuit of higher life.

4. Cock is blind by night: monk should be blind to delights and seductions of senses.

5. Cock will not desert his home: monk should never desert his "mindfulness" which is *his* home.

at a very early date. Bactria and the region westward, from the Caspian Sea to Farsistan, was the home of the religion of Zoroaster; and it is to the Zoroastrian sacred literature that we are indebted for such knowledge as we possess of the domestic animals, as of the civilization development in general of that region at that period. The date of Zoroaster is uncertain, but is quite certainly earlier than 600 B. C.¹ There are no monumental remains which go back to this period. The name of the cock does not appear in the very earliest stratum of Zoroastrian religious literature, the Gāthās, but the character of that material is such that one would scarcely expect to find it there in any case. The cock is, however, abundantly represented in what we may call the second stratum of Zoroastrian literature. The earliest mention is presumably in Vendidad, Fargard XVIII. In the early morning the cock lifts up his voice against the mighty after-midnight darkness (Ushah): "Arise, oh men, recite the Ashem Yad-va hisitem that smites down the Daēvas".² From this onward he is frequently mentioned, and indeed he played a role of great importance in the Persian religion and literature. Besides his common name, Halka, and his onomatapoetic name Kahrkatās (equivalent to cock-adoodle-doo), he had also a religious name, Parōdarsh, *foreseer* (i. e. of the dawn). Numerous passages in the Vendidad, Būndehishn and later literature set forth his sacred character. He was created by God to fight the demon of idleness. By his crowing he puts to flight the demons. He is the bird of light and hence of righteousness, scattering darkness and repelling the hosts of evil that dwell in darkness. He was also the symbol of the resurrection. Carrying out the idea of the sacred character of the cock, in curious contrast with the utilitarian economic breeding of the Chinese, it was counted an act of piety to possess and to raise domestic fowl;

¹ Jackson gives the year 660 for the birth of Zoroaster. (Cf. *Persia Past and Present*.) Basing their conclusions on the appearance of Mazda in Median proper names in Assyrian inscriptions of Sargon, 715 B. C., Ed. Meyer and others date Zoroaster somewhere from 800 back to 1000 B. C. If the readings of the Assyrian inscriptions are positively assured, admitting no alternative, and if it can be proved that Zoroaster did in fact invent the word Mazda and did not borrow it from already existing use, local or otherwise, an earlier date than 660 would be proved beyond question.

² Cf. Vd. 18. 15, 16=23, 24; also Yasht 22. 41, 42.

but after he began to crow the cock might not be eaten. The part which the cock plays in Persian religion and mythology, and the manner of reference to him in Zoroastrian literature, seem to prove satisfactorily that he antedates that religion, and that he was domesticated in Bactria and westward among the Medes and Persians before the time of the founding or reformation of the Persian religion by Zoroaster. Zoroaster was, it must be remembered, a reformer, protesting against the superstition, the idolatry and the materialism of the religion of his age and people. The Gāthās represent that protest and present the reformed religion in its most primitive and purest form. But, as always has been the case, in its second stage Zoroastrianism had to reckon with the religion it undertook to reform, and above all with the great underlying folk cult of that religion, compromising with its forms and practises and superstitions. That second stage is represented by the Vendidad and Bundahishn, and precisely such material as the cock cult or reverence in those books may be taken as evidence of the existence and importance of that cult, and hence as evidence of the domestication of the cock, before the time of Zoroaster.¹ More than that we cannot say from Persian sources. From the fact that there is no name for cock common to Indians and Iranians, it is clear that he was not known before the separation of these two Aryan stocks.² Comparing, however, what we have learned from Persian and

¹ For further information about the cock among the Persians, cf. Jackson A. O. S. vol. xiii p. 15. I am also indebted personally to Prof. Jackson for much assistance in this research, and especially for pointing out to me that the cock is evidently pre-Zoroastrian among the Persians.

² Possibly this statement should be somewhat modified. Prof. Jackson calls my attention to the fact that *Kahrka*, which appears in composition in Avestan *Kahrkatāt*, the popular onomatopoeicon for cock, and in *Kahrkāsa*, the name for the vulture, apparently as "chicken-eater", may be equated with the Sanskrit *krka* (also onomatopoeitic) in *krka-vāku*, also a folk name for cock. With these, (following P. Horn, *Grundriß der neupersischen Etymologie*, p. 189) he also compares the Pahlavi *Kark*, Kurdish *Kurka*, Ossetish *Kharkh*, hen. The suggestion is that there was an onomatopoeitic root name for cock common to Indian and Iranian, which did not, however, by itself become the name of the cock in either Sanskrit or Avestan, altho found in the later Iranian dialects. It should be said that the particular sound contained in this onomatopoeicon belongs to other birds than chickens. So in Aramean *kurkya*, the same sound, means crane.

Indian sources, it would appear that the cock was derived from India and domesticated among the Iranians somewhere probably between the 11th and the 8th centuries.

Greece and Asia Minor.

Hehn in his *Kulturpflanzen* places the appearance of the cock among the Greeks after contact with the Persians, in the latter half of the 6th century B. C. The cock is first mentioned in Greek literature by Theognis, 525 B. C., and later writers frequently designate him as the Persian bird (occasionally also the Median bird). In fact, however, the cock is abundantly represented on monumental remains a century or even two centuries earlier. Hogarth found him on coins from the earliest stratum of the temple of Artemis at Ephesus, circa 700 B. C., and he appears on the very earliest Ionian coins found in Asia Minor, especially in the north, along the Dardanelles, as early as the 7th century.¹ In southern Asia Minor, on the harpy tomb at Xanthus in Lycia, circa 600 B. C., there is a remarkably fine representation of a cock, used as a sacrificial bird, having the characteristic game cock appearance of the Red Junglefowl. In Crete the cock appears on the Melian gems about 700 B. C.² On the Greek main land we have numerous representations going back to the 7th century. Of these perhaps the earliest is a relief found in Sparta in 1880, representing the offering of a cock, apparently in connection with ancestor worship. Of almost the same age is a proto-Attic vase, figured in *Ephemeris Archaïologike*, 1897. A Corinthian Alabastron, with a representation of a cock, in the Metropolitan Museum in New York, is dated 650—600 B. C. An oinochoe from the same place, showing an owl between cocks, is dated 600—550; and

¹ Cf. Head, *Historia Numorum*. One coin ascribed to Dardanus (p. 544), however, an electrum stater with a cock on one side, seems to belong to Chios. This is "one of a series of primitive types, among which are found bulls, lions, and fantastic winged animals." (Miss Agnes Baldwin).

² Sir Arthur Evans thought that he had found the cock on one of the early Minoan monuments at Knossos, which would place his appearance in Greece as early as the third millennium (*Journal of Hellenic Studies* xiv. 1894, p. 342, fig. 65a, also *Scripta Minoa*, p. 133, fig. 74a). This is a very rude representation of a bird, lacking all the characteristic features of the cock, resembling representations of unidentifiable birds found on the Egyptian and Babylonian monuments.

a Chalcedonian amphora, representing a man between two cocks, is assigned to the same date. Indeed, any well equipped museum at the present time contains abundant evidence that the cock was known to the Greeks long before they came in contact with either Persians or Medes. The term Persian bird seems to have been given to the cock by Greek writers, after contact with the Persians, chiefly because of his great importance and his religious use among the Persians, which made him par excellence their bird; partly, perhaps, because of the tradition of his derivation from the East, the land from which the Persians also came.

After the commencement of the Persian era, the representation of the cock on coins, vases and monuments becomes more frequent. Both before and after that time the characteristic of the cock which seems to have appealed most strongly to the Greek imagination was his fighting qualities. To them he was primarily a game cock, and the cock fight is the most familiar and frequent representation on coins of the Greek period from India westward.¹ On this account he was sacred to Ares. That he was also associated with Hermes, presumably for his mantic qualities, is apparent from his representation with the caduceus.² Perhaps it was thru Persian use that he became sacred to Apollo, as herald of the sun. In that connection also he appears attached to the triskele on Pamphylian and Lycian coins.³ Further, as a derivation probably from his relation to the sun, reasoning from awakening to health, he was sacrificed to Asclepius. In this relation, also, he became the chthonic bird, and is used on tombs, as emblematic of the hope of a reawakening to life. He was a bird of good omen among the Greeks as among the Romans, and used sacrificially to avert evil.

¹ The usual type of autonomous coins in Asia Minor, going back to about 700 B. C., is a cock or a cock fight (viz. *Pollux* IX. 84, Hogarth, *Archaic Artemisia*, 1908, p. 89). A cock fight is also the commonest representation of the fowl on Attic vases. For a typical specimen cf. Attic Kylix in Metropolitan Museum, New York, 550—500 B. C.

² Cf., for instance, coins of Sophytes, prince of the Panjab, 316—306 B. C.: obverse, head of Sophytes or Athena; reverse, cock and caduceus, Head, p. 835.

³ Cf. Goblet d'Alviella, *Migration des Symboles*, pp. 76, 222; also Hunter, *Numorum veterum descriptio*, pl. VII. nos. 15, 16; Head, *Coins of the Ancients*, pl. III. fig. 135.

Thruout the whole Greek world, then, from 700 B. C. onward, the cock, always represented most unmistakeably on monuments and coins, reproducing the game cock characteristics which belong to the original breed, was a familiar and omnipresent bird, sacrificial to a number of gods, representing an accumulation of sacred ideals and traditions, and popular for sporting purposes. On the other hand, the bird does not belong to the earliest stratum of Greek civilization. He plays no part in Greek mythology. There are no legends or folklore which attach themselves to him, as to the dove, the swan, the eagle, &c. He came in after the Greeks had passed that stage of their existence. The name by which he was known, ἀλεκτρυών or ἀλέκτωρ, is not Greek.¹ He is not mentioned in Hesiod or Homer, in one or both of which it seems that he must have played a part, had he been known. The latter mentions, among domestic animals, the horse, ass, mule, ox, goat, sheep, pig and dog, and among domestic fowl the goose, but nowhere the cock.² The Homeric poems, do, however, I think, give us a clue to the date and the origin of the cock among the Greeks. As already pointed out, the Greek word for cock, ἀλεκτρυών, fem. ἀλεκτρυαίνα,³ (poetic ἀλέκτωρ, fem. ἀλεκτορίς) is foreign. If we could trace its origin we should presumably find the source of the cock for the Greeks. One turns naturally toward Asia Minor. The remains found in the interior of Asia Minor, both the Hittite and the proto-Armenian monuments, show no trace of the cock. Partly they are too early; partly, as I think will appear from what follows, they were not in the line of transmission or migration of the cock. While, as already stated, the cock is not mentioned in Homer, the word for cock does appear twice as a proper name. Ἀήπιος, an Argonaut and commander of the Boeotians, was the son

¹ Leo Meyer, *Handbuch der griechischen Etymologie*, I. p. 296, derives ἀλέκτωρ from ἀλέξω, citing the analogy of ἀλάστωρ. He would make it mean "*Abwehrer*, wie der kampflustige Hahn gewiß leicht benannt werden konnte".

² The pigeon is commonly included in the list, but, according to Seymour, *Life in the Homeric Age*, the pigeon, whi lewell known to Homer, was a wild, not a domesticated bird.

³ The feminine formations are uncertain and variable, evidence of foreign origin.

of Alektryon (Ἀλεκτρυόνης Il. XVII. 602).¹ Appearing in connection with a man connected in early Grecian story with the exploration of the Euxine to its remotest eastern shores, the name suggests the possibility that the Greeks came in contact with the cock at the extreme eastern limit of the Euxine, and brought him thence to the Greek cities of Asia Minor and so to Greece itself.² The Homeric passages, however, would show that the bird was not as yet possessed by the Greeks, but only just beginning to be known by name. The importation of the bird by sea along the Euxine would parallel, it may be observed, the early importation of the peacock by sea from India, and of the guinea fowl, in the time of Sophocles, from tropical Africa by way of the Red Sea and the Mediterranean.

Italy.

From Greece the cock spread with the early Greek colonies to Italy, where the monumental remains on which he appears are almost as early as those of Greece itself. The cock appears on the earliest coinage of Himera, a Chalcidic colony on the north coast of Sicily, founded about the middle of the 7th century.³ The coinage of Selinos, the most westerly Greek colony in Sicily, represents on one side Apollo and Artemis, standing together on a quadriga, and on the other side the river god Selinos, with a phiale and a lustral branch, before an altar, in front of which is a cock, behind on a stand a bull, and above it a Selinon leaf. Here the cock is evidently sacrificial and connected apparently with the sun.⁴ In Etruria

¹ Leitus is also mentioned by Apollodorus, Diodorus and Pausanias. His tomb was shown at Plataea. According to these later authorities the wife of Alektryon or Alektor, his father, was Cleobule. It will be noted also that the Ἀλεκτρυών of Homer becomes Ἀλέκτωρ in later writers, according to the dictionary the poetic form of the word. The latter is in Od. IV. 10 the name of a Spartan: *νίει δὲ Σπάρτηθεν Ἀλέκτορος ἦρετο κόρην*.

² This would date the cock among the Iranians of the Euxine region at or before 1000 B. C., harmonizing with the earlier dates suggested in the preceding pages, rather than with the later dates. If Hehn's facts and conclusions are correct the pheasant was brought to Greece somewhat later by this same route, i. e. from the eastern end of the Euxine by sea to the Greek cities.

³ The coins themselves may not be older than the commencement of the 5th century. Head, *Historia Numorum*, p. 143.

⁴ *Do.* 168.

the cock appears on top of sepulchral vases (chthonic use) of the Bucchero type as early as the middle of the 6th, perhaps even of the 7th century, and on wall paintings of Etruscan tombs, belonging, it is supposed, to the period when the Greeks had begun to influence Etruscan art. In Latium the cock appears on top of early hut urns (also chthonic) of about the same date as the Etruscan sepulchral vases. The cock is also a frequent emblem on the coins of Samnium and Latium in the 3rd century, and indeed he is almost, if not quite, as common on the coinage of Italian cities as on those of Grecian Asia Minor. A typical coin of the Samnian and Latin cities is that of Cales:¹ obverse a head, reverse crowing cock and legend Caleno.

It is generally assumed that the cock was introduced into Italy by the Greeks, and spread gradually from south to north. But the coins of Samnium and Latium, just described, with the figure of the crowing cock, resemble rather the cock of Gaul than that of Greece; and indeed the name of the cock in Latin, Gallus, or the Gallic bird, suggests a similar origin. The cock may, it is true, have been called *gallus* by the Romans for the same reason that he was called the Persian bird among the Greeks. Even this would show that he was at an early period very common and very important among the Gauls. But it seems to me that the use for the name of the bird of the word Gallus goes further, and indicates that the Italians actually received him from the Gauls. In that case he was domesticated in Central Italy before the coming of the Greeks.

Now we know from other sources that the cock played a part of great importance among the Gauls before the Roman conquest. Caesar so testifies. He tells us also of the religious significance of the cock among the Gauls in language that reminds us of Persian practice. Part of the Gallic race, he says, while raising fowls, yet regarded it as a sacrilege to eat them. The cock, we learn further, was associated with the great god of the Gauls, whom Caesar identifies with Mercury. From Gallic times, also, we have various clay and other representations of the cock, found in various places.² Certain

¹ Maury, *Le Coq Gaulois*, p. 57.

² So Arthur Maury, *Le Coq Gaulois*, who refers especially to the collections in the Museum of St. Germain-en-Laye (p. 54.)

it is that after the Roman conquest he appears on coins from various parts of the country,¹ and that from that time to this he has played a part in France which fairly entitles him to be called the national bird of France. As already noted the French bird is the cock in his form as chanticleer, the crower, or singer, the herald of dawn.

But how did the cock reach Gaul? From the Greek colonies on the coast, or by an independent route thru the interior of Europe? I am inclined to think by the latter route. The Romans found him not only in Gaul, but also in England and among the Germans. Evidently he was in the first century before our era pretty widely distributed as a domestic fowl, and also as a distinctly sacred bird, over western and central Europe. He was not a native. No chicken bones have been found among the shell heaps of Denmark or the lake dwellings of Switzerland, Italy or Hungary. His advent belongs to a later period. The linguistic evidence shows that he was not common property of the Indo-European peoples, nor even of the European peoples before their separation. Celt, Teuton, Lett and Slav know him by no common name. On the other hand, all peoples of Teutonic stock possess a common name for the domestic fowl, and that name, *hahn* or *hen*, *the singer*, connects him rather with the Persian foreteller of the dawn than with the Grecian fighting bird. Everywhere he has a religious character, and apparently the superstitions and religious usages connected with him among the Germans, as among the Gauls, point in the same direction.² The evidence is far from conclusive, but I am inclined to

¹ Maury cites also funerary stones of the first century, bearing cock on ensign, from Strasbourg and Narbonne (pp. 61f.).

² For the linguistic evidence cf. Hehn. He shows, among other things, that the Germans must have constituted one whole, dwelling together in one relatively small region, separate from other peoples, when they applied the name *hana* to the domestic fowl; that the Germans must have been immediate neighbors of the Finns, and presumably not contiguous to the Lithuanians; that the Slavs and Lithuanians must have been already separate when the cock was introduced among them, and the Slavs themselves divided into two divisions. He attempts to show further, by the linguistic evidence, that at the time of the introduction of the cock the Slavs, already separated from the Lithuanians, must have been in close contact with Medo-Persian peoples, Scythians, Sauromatians and the like.

think that at the same time that the cock traveled from the eastern end of the Euxine thru the Dardanelles to the Aegean, he also traveled up the line of the Iranian emigration into Scythia, and so to the Teutons and the Celts; the two lines of migration ultimately meeting in central Italy.

Cyprus.

From Asia Minor and Greece the cock traveled southward to Cyprus. The earliest appearance is on the sarcophagus from Golgoi, now in the Metropolitan Museum in New York, circa 500 B. C., where his use is evidently chthonic. After that date he is quite common and in several sculptures he is represented as a sacrificial bird.¹

Syria.

Syriac literature is too late to be of any service in this investigation, and there is a curious lack of representations of the cock on monuments, coins, gems and the like from Syria. On some old Syrian gems there are representations of birds, but in no case a characteristic representation of the cock. The earliest representations of the cock which I can find is in a tomb at Marissa,² dating from about 200 B. C. This tomb belonged to a Sidonian colony settled in an Edomite city. The language used in the inscriptions was Greek; the animals depicted in the interior of the tomb showed distinct Egyptian influence. The cock himself is on the outer face of the door posts of the inner main chamber. He seems about to crow. In form, coloring and feathering he is still the Red Junglefowl. As already stated, the only mention of the cock in the Old Testament is in Prov. 30: 31, perhaps about or after 300 B. C. He has no fixed name in Hebrew, and at that period seems to have been known to the Jews as a bird possessed by neighboring peoples, but not domesticated in Palestine. When finally domesticated among them (between 200 B. C. and the commencement of our era) he was called by an Aramaic name, *turnegal*, which itself is not Aramaean,

¹ Cf., for instance, 1211 and 1222 in the Cypriote collections of the Metropolitan Museum, Temple-boy holding a cock.

² "Painted Tombs of Marissa", Peters and Thiersch, *Memoir of Palestine Exploration Fund*.

but borrowed from some other people, from whom presumably the Aramaeans derived the bird. The data are meager and any deductions from such meager data must be viewed with caution. The suggestions from the data, such as they are, seem to be that, having reached Cyprus thru Greek influence, the cock was transmitted thence to Phoenicia, but did not become common until after the Greek conquest. The Jews, coming in contact with him as early as 300, thru the Phoenicians or other neighboring people, refused him admission because of the religious and sacrificial character which he possessed among heathen peoples; the same ground on which their ancestors had classed the swine, the hare, &c. as unclean in the dietary laws of Deuteronomy and Leviticus. In the mean time the Aramaeans had received the cock, with the name *turnegal*, from some other source. Thru their influence the bird and his name became common good of all Syria, and so he and his name finally found their way thru the wall of Jewish prejudice into Jerusalem.

Arabia.

From Arabia we have no monumental evidence of the cock, confirmatory evidence, so far as it goes, that his route from India was not by sea but by land. Arabic literature is too late to be of any value for our purposes. It may be worth noting, however, that the cock does appear, altho rarely, in old Arabic poetry, but only in connection with settled habitations. From whatever source the domestic fowl was brought into Arabia the Arabs seem not to have borrowed the name with the bird, but to have invented a name of their own, not onomatopoetic however, but apparently depending on a characteristic not elsewhere similarly noted, viz. *dujāj* or *dajāj*, which Arabic lexicographers explain as given "because of his frequent coming and going (*dajja*)."¹ This is the common designation of both male and female. The cock as such, however, is called *dik*.¹

¹ Is this borrowed from the Turkish? Prof. R. J. H. Gottheil. Cf. also Jacob, *Studien in Arabischen Dichtern*, Heft III, *Das Leben der vorislamischen Beduinen*, Berlin, 1895, p. 84. The name of the cock is in itself an interesting study, which has not yet received the attention it deserves. In general each people uses popularly an onomatopoetic name, an attempted reproduction of the sound made by the cock (less

Egypt.

Earlier Egyptian scholars were inclined to find the cock in some of the Egyptian hieroglyphics, or in some of the bird forms on the monuments, apparently arguing from the present universal use of the bird that it must of course have been familiar among the old Egyptians. In point of fact these are all either uncharacterized pictures of birds, or identifiable with birds of quite a different character, such as the bustard or the quail.¹ Egyptologists without exception are now agreed, I believe, that the cock is not found on Egyptian monuments before the Roman period, and that no word or sign for cock appears in the language. The argument from silence in this case is practically equivalent to a proof that the fowl was not known in ancient or even Ptolemaic (before the Roman period) Egypt, because the wall paintings in the tombs give us such minute and accurate representations of Egyptian life, domestic utensils and animals, creatures used for food and the like, that the cock, if in use, could not have been omitted. Why this was the case is another question. Had the cock been known in Babylonia or Syria or Asia Minor and the Aegean as early as 1400 or perhaps even 1000 B. C., it would pretty surely have been imported into Egypt. After that the Egypt-

often the hen), of the cockadoodledoo type. These names differ slightly from place to place, but are evidently not borrowed from one or more common forms, but invented by each locality for itself. Almost equally frequent are the semi-onomatopoetic names, which do not imitate but merely suggest the sound made (not sound pictures but sound hieroglyphs), and which often are or may be equally applicable to other birds, like cock (cuckoo) and kuru (crow). There is a great deal of similarity between names of this class over considerable areas, apparently due, however, as in the former case, not to borrowing, but to the necessary similarity of all attempts to translate or indicate the bird's own utterance. Then there are the names given to indicate some characteristic of the bird, like the French *Chantecler*, the German *Hahn*, the Persian *Parō-darsh* and probably Arabic *dajāj*. Lastly there are names indicating a foreign origin, like Latin *Gallus*, or simply borrowed from a foreign tongue, presumably with the bird, like Greek *ἀλεκτρούων* and Aramaic *turnegal*. There is no name common to any large linguistic group, with the exception of the Mongolian-Turkish *tawuk* and the Teutonic-Scandinavian *Hahn*.

¹ A good illustration of the older method is found, by the way, in a recent article in the *Zoologist* for Jan. 1912, entitled "The Prehistoric Origin of the Common Fowl", by Frederick J. Stubbs and A. J. Rowe.

ians were less inclined, I should judge, to borrow from outside sources religious ideas or articles of diet, the two being closely connected. In view of the importance of the cock among the Greeks one is, however, inclined to wonder that the Greek mercenaries of Psammetichus and some of his successors, who pervaded Egypt, scribbling their names in temples of the upper Nile, and building in the Delta cities to dwell in, did not bring the cock with them for sacrificial purposes or for the sport of cock fighting. Or the Persians? Or Alexander and the Ptolemies? The silence of the monuments for precisely these periods seems conclusive, puzzling as the fact is. In answer to the question this silence raises, I can merely call attention in general to the apparent slow progress of the bird southward from the Aegean regions, in contrast with his rapid and triumphant passage westward and northward; to the religious prejudices, which would have been particularly strong against a Persian sacred bird, in view of Egyptian experience with the mad Cambyzes; and perhaps also to the largely aquatic conditions of Egyptian domestic economy, better adapted to geese and ducks and cranes and herons than to chickens.

Assyria and Babylonia.

In the earlier editions of his *Kulturpflanzen und Haustiere*, Hehn states that the cock was unknown in Assyria and Babylonia before the Persian period. In the last posthumous eighth edition, O. Schrader, the editor, adds a note, in which he asserts that the cock is mentioned in the list of offerings of Gudea, 2700 B. C.; that he appears in Assyrian times often as offered to the gods; and that he was especially common in neo-Babylonia, where he was kept in the neighborhood of temples. It is also stated that the cock was called in Assyrian by the name *kurku*, and in Sumerian *kurgi*; and that he was also further known in Sumerian as *Tar-lugallu*, supposed to be the source of the Aramaean *Tarnegul* or *Tarnegal*. The idea that the cock is mentioned in the offering lists of Gudea is apparently connected with the identification of a bird on the Gudean monuments as the cock or hen, and also with the appearance of the word *Kurgi* in a sacrificial list of that period. The bird depicted on the Gudean monuments is one of those uncharacteristic and unidentifiable birds which are found on a number of early monuments in various countries.

The cock is singularly easy to represent by some characteristic peculiarities. His peculiar characteristics are so striking that they seize the fancy of the most inexperienced on-looker and, rude as his art may be, he generally contrives in some way to give the impression of the cock. It is owing to this fact that archeologists are practically agreed not to recognize as cocks the unidentifiable, uncharacterized birds which are found, as stated, on monuments of various countries. Anyone who has followed pictorial representations of the cock will see the reason for this. Such birds may be almost any thing else, but they are not cocks.

As to the supposed identification of *kurgi* in the Gudean sacrificial list as cock, it may be said that Assyrian scholars have translated various words in the Babylonian-Assyrian word lists as cock. According to their transliterations and translations, he appears in Sumerian as *tarlu-gallu*, *kukuranu*, and *kurgi*, and in Semitic as *kurku* or *karakku* or *kurakku*. Of these supposed words for cock the one read *ku-ku-ra-nu* appears in a trilingual list, so far untranslated, of the object or character of which we know nothing, except that it does mention birds. *Kukuranu* would undoubtedly be a good onomatopoeic name for the cock, if the reading were certain, but the characters so transliterated might, so far as our present knowledge goes, equally well be transliterated *kudurrānu* — or rather¹ from analogy this would be the natural transliteration — and still other transliterations are quite possible. But further, in the word list in which this word appears it is given as the equation of *tarlugallu*, which has been equated with the Aramaic *tarnegul* or *turnegal*, cock.² Now so far as our present information goes, Sumerian was a dead language many centuries before the Aramaeans reached Babylonia or parts adjacent.³ It is, therefore, rather startling to have an Ar-

¹ So Prof. Clay calls my attention to a feminine proper name, *ku-dur* (*ku*)-*ra-ni-tum*, in the Cassite period; as also to the fact that the signs read *ku-ku* in the supposed *ku-ku-ra-nu* are a common way of writing the *ku-dur* of Nebuchadrezzar and of Kudurenlil.

² This identification was first suggested by Oppert, *Zeitschr. Assy.* VII. 339; and has since been adopted by a number of Assyrian and Syrian scholars.

³ As a curiosity it may be noted that Brockelmann in his *Lexicon Syriacum* gives the word ܐܕܝܐ (*akdaya*) as cock, with a note from Jensen, "Accadius".

amaean word derived from Sumerian. If such a derivation occurred we should expect it to be mediately thru the Semitic Babylonian, not immediately from the Sumerian. Moreover, whether the word transliterated *tarlugallu* was ever actually thus pronounced remains, as in so many Sumerian transliterations, subject to some doubt. If the transliteration be correct it would appear to mean *tarru-king*. *Tar* (or *tarru*) is interpreted in a trilingual list as *bur-ru-um-tu* = "variegated" (Cf. XIV. 4, 6), and the entire combination is apparently equated later (l. 11) in the same text by the *kukuranu* or *kudurranu* already noted.¹ The argument then is that a certain otherwise unknown Sumerian word in a trilingual list dealing with birds may be transliterated *tarlugallu*, which sounds strikingly like the word for cock, *tarnegul* or *tarnegal*, used by the Aramaeans, who many centuries after Sumerian had become a dead language occupied or were in contact with the region where Sumerian had been spoken and where, in the Aramaean period, it still lingered as a church language; that in this trilingual list² the word *tarlugallu* is translated by another unknown Sumerian word, the characters of which might be transliterated *ku-ku-ra-nu*, which sounds like an onomatopoetic name for the cock; and that one element of the word transliterated *tarlugallu* is actually translated in a bilingual list by the Assyrian (Semitic) word *burrumtu* "variegated", a description which might be applicable to the chicken as a bird of variegated color. As an argument by itself to prove acquaintance with the cock in Babylonia in the Sumerian period (2000 B. C.), it can scarcely be accepted as possessing validity.

There are also in the Sumerian word-lists some fifteen forms

¹ On this Prof. Prince writes me that the word does occur in the passage cited, "but in the full form—*edin-dar* (tar)-XU=Assyr. *burrumtu*, 'variegated'; also in loc. cit. l. 11 *ku-ku-ra-nu*-XU=Assyr. *dar* (*tar*) *lugallum*.—*Dar* (tar) in Sumerian does mean variegated in color, and *edin-dar*-XU means literally 'the variegated bird of the field'." *Kuku-ra-nu*-XU=Assyr. *dar-lugallum*, which Assyrian word is a Sumerian loan-word, meaning "the variegated king of birds". He suggests that the word would apply to the cock-pheasant or the peacock better than to the cock, for which he adds other reasons. As to the proposed identification of *tarnegal* with *tar* (or *dar*) *lugallu*, it may be further noted that the initial letters are not the same.

² So far as this word is concerned, the list has two, not three columns.

of *kurgi*, mentioned with other objects of food for sacrifice, all, or practically, all being as yet unidentified. *Kurgi* also has been interpreted as an onomatopoëticon, either borrowed from the "Avestan (old Bactrian) *Kahrka*",¹ or formed in the same manner, and meaning cock. *Kurgi* is interpreted in Semitic as *kurku* and the Semitic *kurku*,² *kurukku* and *karakku* have similarly been supposed to be onomatopoetic names for the cock. Accepting the transliterations given, which always, it must be remembered, are somewhat uncertain, the various names proposed for the cock might equally well indicate some other bird.³ They are mere guesses. Up to the present time we do not know the name of the cock in Assyrian-Babylonian. As Prof. Sayce writes: "There is no certain name for the cock or fowl in Assyrian. As you know, the identification of such words is always doubtful unless they are accompanied by pictorial representations."

It is in fact to these pictorial representations that we must turn to determine the date and character of the appearance of the cock in Babylonia and Assyria. Fortunately, as in the case of Egypt, pictorial representations of birds and animals begin early in Babylonia and are abundant, and hence the argument from silence is peculiarly significant. Beginning at an early date, we have unmistakeable representations of ducks, geese, swans, hawks, eagles, and later ostriches, together with various fantastic and monstrous birds. Besides these clearly defined and characteristic representations of birds we have also from various periods birds not clearly defined, sometimes of the bustard type, sometimes waterfowl, sometimes of a small bird type. None of these, for reasons already stated, can we identify with the cock. The earliest monument on which a cock has been discovered is on the finials of two bow heads on a *bas relief* from the palace of Sennacherib, but ascribed to Ashurbanipal,⁴ that is, about the middle of the 7th cent.

¹ Cf. what has already been said about the date of the cock in Bactria, the names used, &c.

² Mr. Pinches, in a very kind and painstaking correspondence, has suggested other possible identifications from other undeciphered lists, none of which, however, are even approximately onomatopoetic.

³ The Semitic *kurku* certainly sounds more like the Aramaic *kurkya*, crane.

⁴ Brit. Mus. Room XXVIII, slab 14. A. Paterson, *Assyrian Sculptures in the Palace of Sennacherib*, pl. 58. 1913.

B. C. Nothing further identifiable with the cock is found before the late neo-Babylonian period, the time of Nabonidus, circa 550 B. C. To this period belong a couple of illustrations in Layard's *Nineveh and Babylon* of an engraved gem (p. 538), representing a cock on a stand like those used frequently on the boundary stones in connection with the emblems of the Gods. Before this emblem stands a winged figure, with cone and basket, while above is the crescent moon. The other is taken from a cylinder in the British Museum (p. 539), and represents the figure with the cone and basket standing before an altar, behind which altar are two stands bearing, the first the moon symbol, and the second the cock. Here the cock, like the moon, is plainly the emblem of a god. It is on these figures, I fancy, that Schrader bases his statement that the cock often appears in Assyria as offered to the gods. Neither of them in fact represents the sacrifice of the cock, nor have we anything in Assyrian or Babylonian art representing such a sacrifice. Both of them represent the worship of a god symbolized by the cock.¹ Who that god was we do not know.² There are similar representations of the cock on neo-Babylonian seals pictured by Ward.³ In general it may be said that

¹ In view of the relation of the cock to Persia, one is inclined to ask whether these two representations, attesting the introduction of the sacred bird of Persia into Babylonian mythology as a god emblem, do not belong rather to the Persian than to the neo-Babylonian period.

² The frequent connection of the cock with the sun, added to the combination of the cock emblem with that of the moon, suggests that the cock here also represents the sun in some form or phase. Layard calls attention to the supposition of Jewish commentators that the *nergal*, made by the men of Cutha (II Kings 17: 30), was the cock, and suggests that the *Melek Taus* of the Yezidis may also have been a cock, not a peacock. The identification of the cock as the emblem of Nergal seems not improbably correct.

³ Cf. W. H. Ward, *Seal Cylinders of Western Asia*; especially p. 421 and figs. 554, 556, 1126, 1254. Dr. Ward kindly made a special investigation at my request into alleged representations of the cock (or hen) on the ancient Sumerian Gudea monuments and the Kassite boundary (*Kudurru*) stones. He writes: "Certainly the Gula-Bau bird is not the cock. You will observe in *S. C. W. A.* figs. 230—235 it is represented with the goddess, and it is a long-necked bird. See also the stork, p. 420. I have been all over the *kudurru*s and I do not believe that the cock is on them. The tail of the cock nowhere appears. I have suspected the lesser or larger bustard, and yet the bird on the plow, or apart from the plow, might be a sparrow, or some such bird that follows the

in Babylonia the cock begins to appear on gems and seals first after the Persian influence has begun to make itself felt, but there is nothing to indicate any special reference to temples, such as Schrader asserts, beyond the fact that the cock was, as pointed out, a god emblem.

For Babylonia and Assyria, then, the linguistic evidence is unsatisfactory. If the name of the bird appears at all, it is in word lists of as yet unidentified creatures and objects. It is not found in any inscription or record with accompanying statements or qualifying words which would ensure or facilitate identification. The first representation of the cock yet discovered on any monuments, gems, cylinders, &c. is, for Assyria, from the middle of the 7th century B. C., a period of active contact with the Medes; and for Babylonia, a century later, when the Persians had begun to come into immediate relations with Babylon. The representations from this period show the cock as a sacred bird, the emblem of a god.

The question arises: why, if the Persians and Medes had the bird and if it past further to the westward at an earlier date, it did not also enter Assyria and Babylonia. I have already suggested that the cock past up the line of Iranian migration; and that he reached the Greeks thru the Euxine, not thru Asia Minor. Between the Medes and Persians, on the one side, and the Assyrians and Babylonians, on the other, lay a mountain region occupied by semi-barbarous tribes, never thoroly subdued by the Assyrians or Babylonians, and always more or less hostile to them. These formed for a long time a sort of buffer state between Medes and Persians and Assyrians and Babylonians, a barrier to communication and hence also to the transmission of such a creature as the cock, they themselves, from their hostile attitude and uncivilized condition, neither receiving nor imparting such gifts. Ultimately the barrier was worn away, and in Ashurbanipal's time a more direct relation established between the Assyrians and the Medes. A century later the barrier between Persians and Babylonians was broken down, and with the access of Persian

plow." For completeness' sake I may add that in the excavations at Nippur our earliest evidence of acquaintance with the domestic fowl was a rattle in the form of a hen. This could not, judging from its stratum, have been earlier than the Persian period, and I should be inclined to place it even later.

influence the cock invaded the Babylonian plain.¹ Why, when the cock had once been adopted in Babylonia, it did not follow up the line of the Euphrates into Syria more rapidly than it seems to have done, I cannot conjecture, unless it be something to do with its religious character and use; for, as already shown, the cock, once admitted into Babylonia, became a sacred bird, the special emblem of a god.

And now, in conclusion, I judge the history of the cock to have been this: The original home and probably the original place of domestication, Burma and its neighborhood, from which it spread into China at an early date, traditionally 1400 B. C., there to be bred into the Cochín-China fowl. It did not pass from China westward thru the Turks until a late date. When the Iranians entered the Ganges valley, in the second stage of their conquest of India, they came in contact with the domesticated fowl on its western limits. This was at a period not later than 900, and I suspect in reality more nearly 1200 B. C.

The cock past up the line of the Iranian invasion into Bactria, Persia and Media and so on into Scythia and Europe, stretching across finally to the British Isles, and spreading down from Gaul into Central Italy. The Greeks first came in contact with the cock in their expeditions to the extreme eastern end of the Euxine in the Homeric period, perhaps circa 1000 B. C., and later carried him from there to the coasts and islands of the Aegæan, where we find the cock a well known and domesticated bird on the earliest coins and monuments, from 700 B. C. onward. Spreading westward, the Greeks brought him into Sicily, whence he traveled up the line of Greek colonization into Italy, meeting the cock of the more northerly line of migration in Central Italy—Etruria, Latium and the regions thereabout. Somewhat more slowly the Greeks carried the cock southward into Cyprus; whence it was brought to the Phœnician cities, not becoming, however, well-established as a domestic fowl on the Syrian mainland until a late date.

Beginning in the 7th century B. C. the Assyrians and Baby-

¹ Possibly a further reason for the relative tardiness of the cock in Babylonia was the nature of the country, the rivers, canals and marshes so admirable adapted to geese and ducks may have constituted a barrier to the domestication of the fowl in that region.

lonians received the fowl from Media and Persia, where he had been known since a period ante-dating 1000; but he did not become common in Babylonia until the Persian conquest, in the latter half of the 6th century. Whence the Aramaeans derived the bird, we do not certainly know, but it was thru their agency, as the general medium of intercourse, that he was finally introduced to the Jews in Palestine, somewhere about or a little after 200 B. C., reaching Egypt only in the Roman period, 150 years later.¹

¹ Besides those mentioned in the notes, I also owe my thanks to the Smithsonian Institution and to Dr. T. Leslie Shear, Prof. Jas. R. Wheeler and Prof. Egbert of Columbia for helping me "hunt chickens". After this article was in print my attention was called to the Arabic *صرصر* (*ṣarṣar* or *ṣirṣir*), an onomatopoeticon for cock of the same type as the Hebrew *זריר* of Prov. 30, 31.